AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Original) An image signal processing method employed for a color image display device using a plurality of light-emitting materials having difference in afterglow-lasting time, with respect to at least image signals corresponding to a light-emitting material with afterglow lasting a short time, the method capable of providing a current-field image signal with low-pass filtering by characteristically different low-pass filters disposed at branches in a circuit, and mixing outputs fed from the low-pass filters to produce an extended image signal, and adding a pseudo afterglow signal to the current-field image signal by mixing the current-field image signal with the extended image signal for an area in which a one-field-before image signal is greater than the current-field image signal.

3. (Original) The image signal processing method of Claim 2, wherein the extended image signal is obtained through processes of: determining a value of tap T (where, T takes an integer) used for low-pass filtering for each pixel; providing a current-field image signal with the low-pass filtering by characteristically different low-pass filters; and then selecting a maximum output from outputs fed from the low-pass filters.

4. (Original) The image signal processing method of Claim 3, wherein a value of tap T is determined through processes of: detecting a moving area according to a differential signal

between a current-field image signal and a one-field-before image signal; calculating movement velocity of an image pattern according to the moving area; and converting the movement velocity into the value of tap T.

5. (Original) The image signal processing method of Claim 3, wherein tap T takes 0 or takes a value of powers of 2.

6. (Original) The image signal processing method of Claim 4, wherein a moving area is determined by providing a differential signal between a one-field-before image signal and a current-field image signal with binarization process according to a threshold depending on afterglow characteristics of light-emitting materials.

7. (Original) The image signal processing method of Claim 3, wherein each low-pass filter defines compression constant n (n takes a constant); and multiplies a current-field image signal corresponding to T x n pixels disposed rightward and leftward from a target pixel by a predetermined value; and then obtains an average of the multiplied result.

8. (Original) The image signal processing method of Claim 7, wherein compression coefficient n is determined so as to be powers of 2 or to be a reciprocal of powers of 2.

9. (Original) The image signal processing method of Claim 2, wherein according to a

result of comparison between an extended image signal and a current-field image signal, either the extended image signal or the current-field image signal is selected as output, and the current-field image signal is mixed with the extended image signal.

10. (Original) An image signal processing apparatus for driving a color image display device employing a plurality of light-emitting materials having difference in afterglow-lasting time, the apparatus comprising:

pseudo afterglow adding means for adding a pseudo afterglow image signal to an image signal at least corresponding to a light-emitting material having a short afterglow time,

the pseudo afterglow adding means further including:

extended image signal generating means for providing a current-field image signal with low-pass filtering by characteristically different low-pass filters, and combining outputs from each low-pass filter to generate an extended image signal including a pseudo afterglow signal; and

image generating means for mixing the current-field image signal with the extended image signal, and adding the pseudo afterglow signal to the current-field image signal for an area in which a one-field before image signal is greater than the current-field image signal.

11. (Original) The image signal processing apparatus of Claim 10, wherein the extended image signal generating means further includes a tap value determining unit for determining a value of tap T (T takes an integer) for each pixel for low-pass filtering; a plurality

of low-pass filtering sections for providing a current-field image signal with the low-pass filtering according to the value of tap T defined at the tap value determining unit; and a signal selector for selecting a maximum output in outputs fed from the low-pass filters.

12. (Original) The image signal processing apparatus of Claim 11, wherein the tap value determining unit further includes a moving area detector for detecting a moving area having moving image according to a differential signal between a current-field image signal and a one-field-before image signal; a movement velocity calculator for determining movement velocity of an image pattern from the moving area; and a tap value converter for converting the movement velocity fed from the movement velocity calculator into a value of tap T according to a predetermined rule.

13. (Original) The image signal processing apparatus of Claim 12, wherein the tap value converter converts the movement velocity into tap T so that tap T takes 0 or takes values of powers of 2.

14. (Original) The image signal processing apparatus of Claim 12, wherein a moving area detector further includes a one-field delay section for generating a one-field-before image signal by providing a current-field image signal with one-field delay; a differential image section for calculating a differential signal between the current-field image signal and the one-field-before image signal; and a binarization section for binarizing the differential signal according a

threshold that depends on afterglow characteristics of light-emitting materials and then detecting a moving area in which the differential signal is greater than the threshold.

15. (Currently Amended) The image signal processing apparatus of Claim 11, wherein each low-pass filtering section further includes a tap value multiplier that defines compression coefficient n (n takes an integer) and multiplies tap T by compression coefficient n; an image multiplier that multiplies a current-field image signal by a predetermined value; and a filter that receives, from the image multiplier, output signals corresponding to T x n pixels disposed rightward and T x n pixels disposed leftward from a target pixel, and then ~~calculate~~ calculates an average of the output signals.

16. (Original) The image signal processing apparatus of Claim 15, wherein compression coefficient n is determined to be powers of 2 or to be a reciprocal of powers of 2.

17. (Original) The image signal processing apparatus of Claim 10, wherein an image mixing means further contains a signal comparing section for comparing an extended image signal with a current-field image signal; and a signal selecting section for selecting either the extended image signal or the current-field image signal according to a result from the signal comparing section.